

REMARKS

Claims remaining in the present patent application are numbered 1-23. The rejections and comments of the Examiner set forth in the Office Action dated March 19, 2003 have been carefully considered by the Applicants. Applicants respectfully request the Examiner to consider and allow the remaining claims.

35 U.S.C. §102 Rejection

The present Office Action rejected Claims 1-5 and 9-23 under 35 U.S.C. 102(e) as being unpatentable over Sawada et al., (U.S. Patent No. 6,476,821). Applicants have reviewed the above cited references and respectfully submit that the present invention, as recited in Claims 1-5, and 9-23, is neither anticipated nor rendered obvious by the Sawada et al. reference.

Independent Claims 1, 10, and 18

Applicants respectfully point out that currently amended independent Claims 1, 10, and 18 each recite that the present invention includes, in part:

a display panel comprising a pixel matrix
comprising: an (m x n) pixel frame buffer region;
and an x pixel border region for only displaying a
display attribute, wherein said border region
surrounds said frame buffer region . . .
(Emphasis Added)

The present invention pertains to a controllable pixel border that surrounds a frame buffer region for improved viewability of a display device. For instance, the pixel border is useful for increasing viewability, e.g., contrast, of characters that are displayed along the edge of a frame buffer region.

In particular, independent Claims 1, 10, and 18, as currently amended, each recite that a pixel border region is used only for displaying a display attribute. Further, the pixel border region as claimed in independent Claims 1, 10, and 18 is distinct from and separate from the frame buffer region which displays images generated from image data stored in a frame buffer memory.

As presently claimed, the pixel border region only displays a display attribute, and does not display image data. In each of the currently amended independent Claims 1, 10 and 18, the pixel border region is distinctly defined separately from a frame buffer region. Moreover, in the currently amended independent Claims 1, 10, and 18, a distinction is made as to the displayed data between the border region and the frame buffer region. Specifically, the frame buffer region displays images from image data stored in the frame buffer memory, and the border region displays a display attribute.

It is important to note that the display attribute displayed in the border region does not comprise image data, as presently claimed in currently amended independent Claims 1, 10, and 18. To provide further support to the distinction between display attribute data and the image data, lines 3-8 of page 26 of the Specification in the present Application recite, as follows:

It is appreciated that while various images can be rendered in the frame buffer region 314, the border region 312a can only be programmed to have a single display attribute at a time, and that single display attribute is applied across all pixels of the border region 312a. (Emphasis Added)

Applicants respectfully note that the prior art reference, Sawada et al., does not comprise nor suggest the present method of a display panel comprising a pixel border region for only displaying a display attribute that is separate from the frame buffer region that displays an image.

In contrast to independent Claims 1, 10, and 18, as currently amended, of the present invention, the Sawada et al. reference pertains to an image displaying apparatus that can display an image with display attributes varying from area to area on a display screen. In particular, the Sawada et al. reference discloses an image displaying apparatus that can accommodate multiple images at one time. These multiple images are portrayed in different areas (e.g., windows) of a

display screen. (See col. 6, lines 61-65 of the Sawada et al. reference).

In particular, in the Sawada et al. reference, one of the images that is displayed has a changing display attribute that modifies the actual display of the image in a specific area of the display screen. The other images on the display screen are not modified. As such, the Sawada et al. reference discloses the changing of a display attribute within a specific area to modify the display of an image. That is, the contrast can be separately controlled within different areas of a display screen to better view varying types of images (e.g., text images, static images, and dynamic images) in those different areas. (See Summary, col. 2, lines 16-26)

As a further distinction, the Sawada et al. reference refers to changing a display attribute in an area that is displaying an image. The area that is displaying an image in the Sawada et al. reference is analogous to the frame buffer region in the present invention, as is claimed in currently amended independent Claims 1, 10, and 18. As such, the Sawada et al. reference discloses the changing of a display attribute to modify the display of an image. Moreover, the Sawada et al. reference discloses the changing of a display attribute within an area of a display that displays images, i.e., a frame buffer region.

On the other hand, the present invention, as presently claimed in currently amended Independent Claims 1, 10, and 18 specifically recites a display panel comprising a pixel border region for only displaying a display attribute, wherein the pixel border region is distinct from the frame buffer region that displays images. As such, the pixel border region does not display images, and only displays a display attribute. Moreover, that display attribute is applied across all the pixels of the border region.

Thus, Applicants respectfully submit that the currently amended independent Claims 1, 10, and 18 of the present invention are neither anticipated nor rendered obvious by the Sawada et al. reference, and are in a condition for allowance. In addition, Applicants respectfully submit that Claims 2-9 which depend from independent Claim 1, as currently amended, are also in a condition for allowance as being dependent on an allowable base claim. Also, Applicants respectfully submit that Claims 11-17 which depend from independent Claim 10, as currently amended, are also in a condition for allowance as being dependent on an allowable base claim. Further, Applicants respectfully submit that Claims 19-23 which depend from independent Claim 18, as currently amended, are also in a condition for allowance as being dependent on an allowable base claim.

35 U.S.C. §103 Rejection

The present Office Action rejected Claims 6, 7, and 8 under 35 U.S.C. 103(a) as being unpatentable over Sawada et al. Applicants have reviewed the above cited references and respectfully submit that the present invention, as recited in Claims 6-8, is neither anticipated nor rendered obvious by the Sawada et al. reference. Specifically, in light of the arguments set forth in the previous §102 remarks, Applicants respectfully submit that the currently amended independent Claim 1 of the present invention is neither anticipated nor rendered obvious by the Sawada et al. reference, and is in a condition for allowance. As such, Applicants respectfully submit that Claims 6, 7, and 8 which depend from independent Claim 1, as currently amended, are also in a condition for allowance as being dependent on an allowable base claim.

CONCLUSION

In light of the facts and arguments presented herein, Applicants respectfully request reconsideration of the rejected Claims.

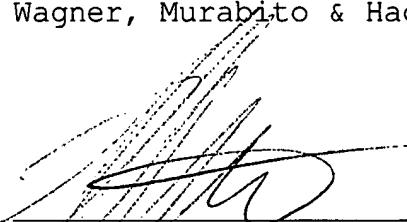
Based on the arguments presented above, Applicants respectfully assert that Claims 1-23 overcome the rejections of record. Therefore, Applicants respectfully solicit allowance of these Claims.

The Examiner is invited to contact Applicants' undersigned representative if the Examiner believes such action would expedite resolution of the present Application.

Respectfully submitted,

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